

# *NetGain Controls, Inc.*

695 W 1725 N / Logan, UT 84321 / 435-705-5100 / 815-524-5038 (FAX) / sales@ngcontrols.com

# *WarP-Drive™*

## *Throttle – Pedal Assembly*

By: NetGain Controls, Inc.

*Powering the future!*



## Installation Guide

© 2012 All Rights Reserved  
NetGain Controls, Inc.

# Introduction

The WarP-Drive Hall-effect pedal assembly represents a significant improvement over conventional electric vehicle throttle inputs such as 0-5kohm “potbox” assemblies. This unit is designed to simplify both OEM and conversion applications and provide a professional, high-quality installation. Some of its features include:

- Fully redundant, dual output Hall-effect electrical sensor integrated into assembly.
- Dual load/return force generation
- Compatible with the NetGain Controls WarP-Drive controllers

# Installation Overview

Estimated time: depends on fabrication needs for mounting bracket. 15-30 minutes with bracket already completed.

1. Design bracket for mounting of pedal. **Ensure that pedal will have sufficient clearance so that it will not bind on any nearby objects.**
2. Mount pedal securely to bracket.
3. Determine path for throttle cable. Route cable.
4. Make final electrical connections.
5. Test throttle operation with controller with vehicle drive not connected to roadway.

# Package Contents

When you open the package, verify that you received everything.

The package includes the throttle pedal.

# Tools Required

No special tools are required for the pedal itself. Various common tools and hardware will be required to complete the installation.

# Installing

For conversion applications, first ensure that the pedal can be installed with the foot pedal portion of the assembly residing in the original vehicle's pedal location. If the pedal cannot fit in the original pedal location, consider using the NetGain Controls Cable-Pull throttle assembly (WDT-CP).

Securely mount the pedal using all three mounting holes on the pedal assembly. It is the installer's responsibility to ensure that the pedal is mounted with the correct spacing between other pedals, and that

it can be properly accessed by the driver without obstruction. Verify that the pedal can rotate through its entire movement.

Route the connector of the cable assembly (sold separately, part number 82114, 82115, or 82116) from the pedal assembly to the WarP-Drive controller or other selected device. If the cable must pass through metal such as a firewall or bulkhead, ensure that proper relief (such as a rubber grommet) is used to prevent chaffing of the cable.

Once the pedal is installed and connected, verify proper function with the controller turned on but the vehicle wheels not engaged with the road.

## Maintenance Procedures

It is recommended that the throttle unit is regularly checked for proper operation. However, if installed correctly, no adjustment, lubricating, or maintenance is required.

## Electrical Specifications

Input Voltage:	5.0VDC +/- 0.25VDC
Input Current:	10mA maximum per channel
Orange wire:	Channel 1, 0.8V to 4.45V
Blue wire:	Ground for channel 1
White wire:	5V supply for channel 1
Green wire:	Channel 2, 1.60V to 4.95V
Black wire:	Ground for channel 2
Red wire:	5V supply for channel 2